![Polycom®]

Polycom® Unified Communications for Cisco Environments

Contents

Polycom® Unified Communications for Cisco Environments

Polycom is pleased to announce the release of Polycom Unified Communications for Cisco environments.

These release notes document a number of deployment models and list current software versions for Cisco and Polycom products in each deployment. These release notes also list known and resolved issues for these products.

> **Web Info: See the Deployment Guide for Polycom Unified Communications for Cisco Environments**
>
> Find the latest deployment guide for Polycom Unified Communications for Cisco Environments at *Polycom Unified Communications with Cisco*.

New Hardware Support

In addition to the MPM-x blade for the RMX, the MPM-rx blade is now supported by the RMX 2000 and RMX 4000 series systems. The RMX 1800 includes an MPM-rx internally.

Supported Deployment Models

Polycom supports the following deployment models when integrating Polycom Unified Communications with Cisco environments:

- Register Polycom Telepresence Systems with Cisco Unified Communications Manager
- Securely Register Polycom Telepresence Systems with CUCM
- Integrate SIP Polycom RealPresence Platform with CUCM
- Integrate Polycom RealPresence Platform with Video Communications Server
- Integrate Polycom RealPresence Platform SIP with Cisco Unified Border Element
- Integrate Polycom Converted Management Application H.323 with CUCM

Register Polycom Telepresence Systems with Cisco Unified Communications Manager

When you register your Session Initiation Protocol (SIP) Polycom telepresence endpoints with Cisco Unified Communications Manager (CUCM), your endpoints have a single source for call admission control and bandwidth management. Cisco endpoints can also use telephony functions like hold and transfer in calls with Polycom endpoints.

When Polycom telepresence endpoints have the Telepresence Interoperability Protocol (TIP) option key installed, you can participate in calls with TIP-capable Cisco TelePresence Server (CTS) endpoints and

Cisco Multipoint Control Units (MCUs). The Polycom® RealPresence® Collaboration Server can host TIP conference calls and supports Immersive Telepresence (ITP) multipoint conferences.

The following tables list the verified versions of Cisco and Polycom products supported in this deployment model.

Verified Cisco Product Versions

Cisco Products	Version
Cisco Unified Communications Manager	9.1.2.11900-12
Cisco Unified IP Phones: 7960, 7961, 7962, 7965, 7975, 7985, 9971	CUCM 9.1.2 Default Load
Cisco Jabber for Windows	9.7(0)
Cisco CTS500-32, TX1310, TX9000	6.1.2.1(5)
Cisco CTS500-37, CTS1300, CTS3010	1.10.5.1(4)
Cisco EX, C and SX Series	7.1.1
Cisco TelePresence Video Communications Server	X8.1.1
Cisco TelePresence Server	4.0(1.57)

Verified Polycom Product Versions

Polycom Products	Version
Polycom RealPresence Collaboration Server	8.4 - MPMx card required for TIP support
Polycom® HDX® systems	3.1.3.2
Polycom® RealPresence® Group (300, 500, and 700)	4.1.3.2
Polycom® Touch Control for HDX systems	1.9.0
Polycom® Touch Control for RealPresence Group Series	4.1.3.2 Panel Software and 4.1.3.2 Operating System software is compatible with Group Series 4.1.3.2 and 4.1.3.2 software
Polycom® RPX™, OTX®, ATX™ Immersive Solutions	3.1.3.2
Polycom® Multipoint Layout Application	3.1.2.8
Polycom® RealPresence DMA	6.1.0

Securely Register Polycom Telepresence Systems with CUCM

When you register your SIP Polycom telepresence endpoints with CUCM using Transport Layer Security (TLS) registration, you have a single source for call admission control and bandwidth management. Cisco endpoints can also use telephony functions like hold and transfer when in calls with Polycom endpoints. In this deployment model, Polycom and Cisco endpoints can place secure Datagram Transport Layer Security (DTLS) calls to any endpoints that also support DTLS.

When Polycom telepresence endpoints have the TIP option key installed, you can participate in calls with TIP-capable CTS endpoints and MCUs. You can integrate CUCM with SIP using a Polycom RealPresence Collaboration Server. The RealPresence Collaboration Server can host TIP conference calls and supports ITP multipoint conferences. Customers with security requirements can implement registration in a secure manner with encrypted signaling and can choose encrypted or unencrypted media communications.

The following tables list the verified versions of Cisco and Polycom products supported in this deployment model.

Verified Cisco Product Versions

Cisco Products	Version
Cisco Unified Communications Manager	9.1.2.11900-12
Cisco Unified IP Phones: 7960, 7961, 7962, 7965, 7975, 7985, 9971	CUCM 9.1.2 Default Load
Cisco Jabber for Windows	9.7(0)
Cisco CTS500-32, TX1310, TX9000	6.1.2.1(5)
Cisco CTS500-37, CTS1300, CTS3010	1.10.5.1(4)
Cisco EX, C and SX Series	7.1.1
Cisco TelePresence Video Communications Server	X8.1.1
Cisco TelePresence Server	4.0(1.57)

Verified Polycom Product Versions

Polycom Products	Version
Polycom RealPresence Collaboration Server	8.4 - MPMx card required for TIP support
Polycom HDX systems	3.1.3.2 Requires TIP option key
Polycom Touch Control for HDX systems	1.9.0

Polycom Products	Version
Polycom RPX, OTX, ATX Immersive Solutions	3.1.3.2
Polycom Multipoint Layout Application	3.1.2.8

Integrate SIP Polycom RealPresence Platform with CUCM

You can configure the Polycom® Distributed Media Application™ (DMA) system as a SIP proxy and registrar for your video environment. When you use the DMA system as a SIP peer to CUCM, the DMA system can host video calls between Cisco endpoints that are registered with Cisco Unified Communications Manager and Polycom SIP and H.323 endpoints that are registered with the DMA system.

The following tables list the verified versions of Cisco and Polycom products supported in this deployment model.

Verified Cisco Product Versions

Cisco Products	Version
Cisco Unified Communications Manager	9.1.2.11900-12
Cisco TelePresence Video Communications Server	X8.1.1
Cisco TelePresence Server	4.0(1.57)
Cisco Unified IP Phones 7960, 7961, 7962, 7965, 7975	Cisco Unified Communications default load
Cisco Video Phones 7985, 9971	Cisco Unified Communications default load
Cisco Jabber for Windows	9.7(0)
Cisco CTS500-32, TX1310, TX9000	6.1.2.1(5)
Cisco CTS500-37, CTS1300, CTS3010	1.10.5.1(4)
Cisco EX, C and SX Series	7.1.1

Verified Polycom Product Versions

Polycom Products	Version
Polycom RealPresence Collaboration Server	8.4 MPMx card required for TIP support
Polycom HDX systems	3.1.3.2

Polycom Products	Version
Polycom RealPresence Group Series 500	4.1.3.2
Polycom OTX 300 Systems	3.1.3.2 Requires TIP option key Requires Polycom Touch Control
Polycom RPX 200 and 400 Systems	3.1.3.2 Requires TIP option key. Requires Polycom Touch Control
Polycom ATX HD 300 Systems	3.1.3.2 Requires TIP option key Requires Polycom Touch Control
Polycom Touch Control device for HDX and ITP systems	v1.9.0
Polycom Touch Control device for RealPresence Group Series	v4.1.3.2 Panel Software and v4.1.3.2 Operating System software is compatible with Group Series v4.1.3.2 and v4.1.3.2 software
Polycom RealPresence DMA	V6.1.0

Integrate Polycom RealPresence Platform with Video Communications Server

You can configure the Polycom DMA system as a SIP proxy and registrar for your video environment. When you use the DMA system as a SIP peer-to-Video Communications Server (VCS), the DMA system can host video calls between Cisco endpoints that are registered with VCS and Polycom SIP endpoints or MCUs that are registered with the DMA system.

The following tables list the verified versions of Cisco and Polycom products supported in this deployment model.

Verified Cisco Product Versions

Cisco Products	Version
Cisco TelePresence Video Communications Server	X8.1.1
Cisco TelePresence MCU	4.3
Cisco CTS500-32, TX1310, TX9000	6.1.2.1(5)
Cisco CTS500-37, CTS1300, CTS3010	1.10.5.1(4)
Cisco EX, C and SX Series	7.1.1

Verified Polycom Product Versions

Polycom Products	Version
Polycom RealPresence Collaboration Server	8.4 MPMx card required for TIP support
Polycom HDX systems	3.1.3.2
Polycom RealPresence Group Series 500	4.1.3.2 Requires TIP option key
Polycom Touch Control device for use with HDX and ITP systems	1.9.0
Polycom Touch Control device for use with RealPresence Group Series	4.1.3.2 Panel Software and 4.1.3.2 Operating System software is compatible with Group Series 4.1.3.2 and 4.1.3.2 software

Integrate Polycom RealPresence Platform SIP with Cisco Unified Border Element

When you use the Cisco Unified Border Element (CUBE) SP Edition feature on a Cisco 1000 series Aggregation Services Router (ASR), you can deploy Polycom RealPresence infrastructure in your environment. The CUBE SP Edition feature is designed for customers and service providers that provide protocol interworking, admission control, and security demarcation services. CUBE SP Edition enables direct IP-to-IP interconnect between domains.

The following tables list the verified versions of Cisco and Polycom products supported in this deployment model.

Verified Cisco Product Versions

Cisco Products	Version
Cisco Unified Communications Manager	9.1.2.11900-12
Cisco TelePresence Video Communications Server	X8.1.1
Cisco CTS500-32, TX1310, TX9000	6.1.2.1(5)
Cisco CTS500-37, CTS1300, CTS3010	1.10.5.1(4)
Cisco EX, C and SX Series	7.1.1
Cisco TelePresence Server	4.0(1.57)
Cisco ASR 1000 Series (CUBE SP Edition)	IOS-XE 15.2(4)S3, SBC 3.7.3

Verified Polycom Product Versions

Polycom Products	Version
Polycom RealPresence Collaboration Server	8.4 MPMx card required for TIP support
Polycom HDX systems	3.1.3.2 Requires TIP option key for Telepresence
Polycom Multipoint Layer Application	3.1.2.8
Polycom RealPresence Resource Manager	8.2
Polycom RealPresence DMA System	6.1.0

Integrate Polycom Converted Management Application H.323 with CUCM

When you register your Polycom components with the Polycom® Converged Management Application™ (CMA®) system, bandwidth and call admission control are each split between the CMA system and Cisco Unified Communications Manager. The Polycom RealPresence infrastructure supports audio and video calls. You can also use the Polycom CMA system to manage your Polycom components and you can take advantage of CMA provisioning with dynamic management.

Note: No Longer Tested by Polycom

Polycom no longer tests the Polycom CMA system with the most recent versions of Polycom or Cisco products. When necessary, Polycom technical support requires customers to test reported issues on the supported verified versions.

Support for Polycom-Enabled Unified Communications

Polycom Implementation and Maintenance services provide support only for Polycom solution components. Additional services for supported third-party Unified Communications (UC) environments integrated with Polycom solutions are available from Polycom Services. Polycom Services can help you successfully design, deploy, optimize, and manage your deployment. For additional information and details please see Polycom Services or contact your local Polycom representative.

These release notes list current verified versions of Cisco and Polycom products that support Polycom Unified Communications for Cisco environments.

Resolved Issues

The following table lists resolved issues for the release of Polycom Unified Communications for Cisco Environments.

Resolved Issues for the Release of Polycom Unified Communications for Cisco Environments

Issue Number	Description
BRIDGE-355	In a Polycom RealPresence Collaboration Server conference between two Cisco TelePresence System (CTS) 3010s, when one CTS 3010 uses the Hold and Resume function, local video displays for the other CTS 3010.
BRIDGE-769	In a dial-in RealPresence Collaboration Server conference between a CTS and a Polycom HDX using H.323 protocol, when the CTS uses the Hold function, content continues to display on the HDX. When the CTS uses the Resume function, no audio or video displays on the HDX.
BRIDGE-4240	A Dual Tone Multi Frequency (DTMF) code initiated from a Polycom Touch Control keypad is not recognized, and the conference room Interactive Voice Response continues to ask for the meeting ID. After three prompts, the call disconnects or is transferred to the help desk as a failure to enter meeting ID.
BRIDGE-7359	In calls hosted by a Telepresence Interoperability Protocol (TIP) enabled RealPresence Collaboration Server, CTS and Cisco TX endpoints occasionally cannot connect.
CSC-50	An echo is heard on the Polycom Open TelePresence Experience (OTX) when in a call with a CTMS or CTS.
CSC-67	In calls hosted by the Cisco Telepresence Multipoint Switch that involve both Polycom Immersive Telepresence (ITP) endpoints and a CTS system, the CTS video quality is not optimal.
CSC-68	In a point-to-point call between an OTX and a CTS 1300, the CTS receives sub-optimal audio from the OTX.
CSC-86	When an HDX dials into TelePresence Server (TPS) using H.323 protocol the HDX video is choppy as a result of packet loss.
CSC-104	When a Cisco TX 9000 joins a RealPresence Collaboration Server conference, video quality decreases.
CSC-112	A Cisco C60 endpoint drops from audio/video to an audio-only call when you add a third site to a conference restricted to a 786k line rate.
CSC-118	When using Transport Layer Security (TLS) and Over The Top Registered (OTTr), a TIP-enabled HDX connects with problems to an unsecured conference and does not have a trusted certificate installed.
CSC-123	A Cisco TX 9000 sometimes drops from a conference hosted by a RealPresence Collaboration Server.
CSC-125	When dialing in with a Cisco EX90 to an Encrypted When Possible (EWP) conference that negotiates encryption using a Virtual Entry Queue (VEQ) and another participant is already sharing content, content takes some time to display when the EX90 joins.

Issue Number	Description
CSC-127	When Polycom RealPresence Desktop is registered as an internet guest and connects to an Encrypt When Possible Video Conference through VEQ encryption, RealPresence Desktop is unable to receive shared content.
GS-12296	In a TIP-aware RealPresence Collaboration Server conference between a TIP-enabled RealPresence Group system and a CTS 3010, when the CTS shares content, the content plays incorrectly on the RealPresence Group Series system's People channel.
GS-13955	RealPresence Group Series systems cannot control the C90 camera when both are registered with Polycom RealPresence Distributed Media Application (DMA) and encryption is Off.
GS-15020	When a RealPresence Group Series system is configured with TIP enabled and joins a TIP-aware RMX conference, content sent from the RealPresence Group system plays on the People channel.
GS-17409	RealPresence Group Series systems receive poor or no video in calls with Cisco TX9000 at a 768kb line rate. All other line rates work.
VIDEO-96140	When in a call taking place on the Cisco TelePresence Server, HDX endpoints do not correctly display the call format in the call statistics.
VIDEO-96793	In a point-to-point call between and OTX and an HDX, when the OTX shares content, the HDX pulls the content from the OTX before the content is uploaded on the OTX screens. As a result, the OTX experiences a delay before uploading the content.
VIDEO-97050	In a point-to-point call between a Polycom RealPresence Experience (RPX) registered to a Polycom DMA system and a CTS registered to CUCM, the Polycom RPX incorrectly displays the far site as an HDX 7000 in the call statistics.
VIDEO-97201	When a Cisco phone places an HDX on hold, the Resume key does not resume the call.
VIDEO-107988	When an HDX using Transport Layer Security as the primary transport protocol places a call, the ACK to any incoming 200 OK or INVITE goes out using UDP, which causes the AT&T SBC to terminate the call.
VNGR-26221	When a HDX and a CTS are in a call hosted by a RealPresence Collaboration Server registered to a DMA system, the Gathering Phase screen is pixelated.

Known Issues

The following table lists the known issues for the release of Polycom Unified Communications for Cisco Environments. Refer to the Polycom product release notes for more information about the known issues related to individual products for this solution. Workarounds are indicated where available.

Known Issues for the Release of Polycom Unified Communications for Cisco Environments

Issue Number	Description	Workaround
VIDEO-97054	H.323 calls between CTS systems registered to CUCM and HDX or ITP systems registered to the Cisco IOS gatekeeper display sub-optimal video quality for the first few seconds of a call.	None
VIDEO-99544	The HDX version and the TP Tool version no longer match up. The HDX version is 3.1.0 and the TP Tool version is 3.0.6.	None
VIDEO-102364	In a call between an HDX and Cisco Jabber for Windows, content shared from Cisco Jabber for Windows does not display on the HDX. The HDX can send content successfully to Cisco Jabber for Windows via the People channel. Cisco Jabber for Windows can send content successfully to another Cisco endpoint.	Set SIP profile of Jabber and HDX to allow early media
BRIDGE-12599	Cisco TelePresence System (CTS) 3010 has problems connecting to RMX, and when it does connect, drops a significant number of calls.	None
BRIDGE-12828	Cisco Unified Communications Manager endpoints sometimes connect to a TIP Video+Content conference with audio only.	None
BRIDGE-13114	The CTS 3010 drops when dialing into TIP Video+Content Conference.	None
BRIDGE-13342	Cisco Endpoints do not display content on the RMX when registered with CUCM using H.323 with TIP Video+Content mode.	None
BRIDGE-13518	Cannot see video from endpoints using advanced video coding (AVC) on endpoints using scalable video coding (SVC) in an RMX conference.	None
BRIDGE-13728	Network packet captures are not reliable on the RMX.	None
BRIDGE-13890	Polycom® RealPresence® Immersive Studio® system does not receive primary video in a conference with RMX.	None
DMA-13318	In end-to-end calls with the Cisco SX20 and C-Series, DMA and HDX display the error message 'Far Site Not Capable of Receiving Content'.	None
GS-15274	A Group Series system connected with TIP disabled to a Cisco Telepresence endpoint sends and receives single stream content (content over people) after resuming a call on hold.	None
GS-17803	After crashing in an RMX bridge, TIP-enabled Group Series 700 systems transmit blue screen video.	None
GS-17947	In calls with RMX, RealPresence Immersive Studio system receives TIP content on the main People screen.	None
GS-18210	In calls with Cisco TelePresence System, Group Series system displays frozen video when the CTS sends content in a SIP P2P call.	None
GS-18213	In calls with Cisco TX9000 and EX90, Group Series system displays no video in a SIP P2P call.	None

Issue Number	Description	Workaround
GS-18221	Group Series systems lose incoming video from the CUCM SX20 in P2P calls after resuming calls on hold on the SX20.	None
GS-18596	In calls with Cisco TX9000, Group Series 700 systems display poor quality content.	None
GS-18598	In SIP and TIP calls with Group Series systems, the Cisco CTS1300 segment switching does not work.	None
GS-18617	RealPresence Immersive Studio systems transmit poor video to the Cisco CTS 3010 in P2P SIP calls.	None
VIDEO-111328	In P2P SIP calls with Cisco CTS systems, HDX systems cannot send content.	None
VIDEO-111339	The HDX displays poor content sent from a CUCM EX90.	None
VIDEO-111350	The HDX does not display content sent from a Cisco TelePresence Server.	None
VIDEO-111372	Polycom ITP systems registered with a predefined CUCM drop from calls with Cisco TelePresence Server after 45 seconds.	None
VIDEO-111373	Polycom RPX and OTX cannot send content in TIP V+C conferences with the CTS3010.	None
VIDEO-111395	HDX crashes in RMX dial-out calls.	None
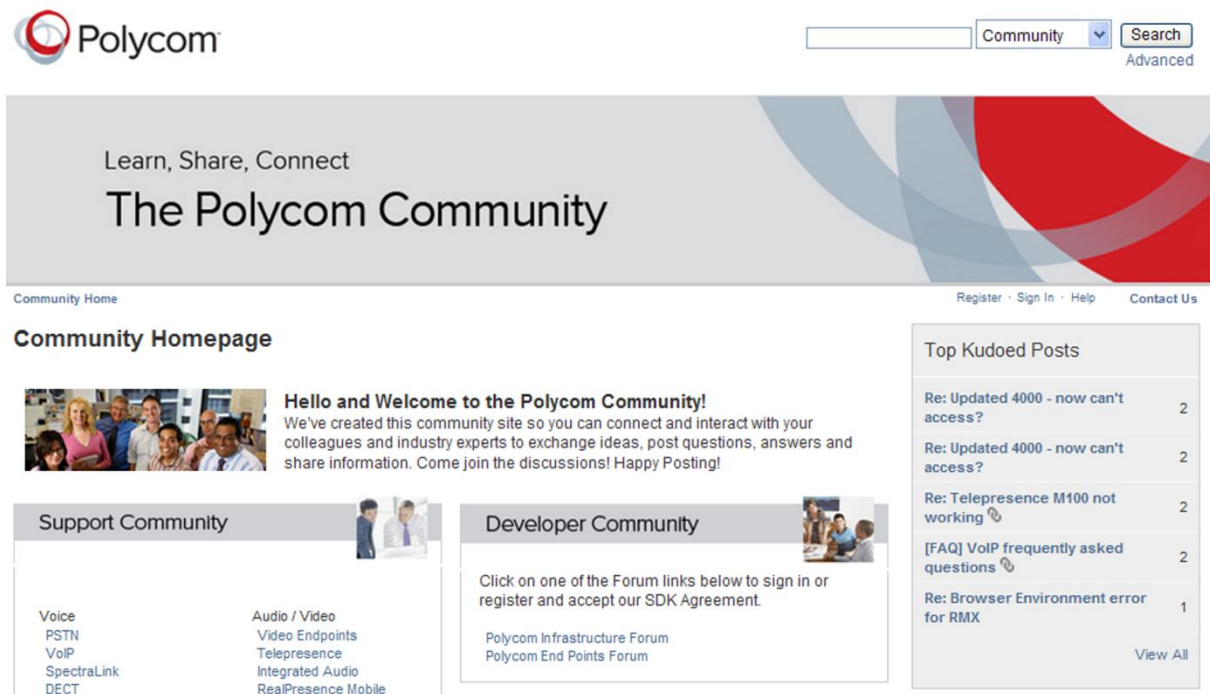
Get Help

For more information about installing, configuring, and administering Polycom products, refer to Documents and Downloads at Polycom Support.

For more information on all of Polycom's strategic solutions for Cisco, see Polycom Unified Communications with Cisco.

The Polycom Community

The Polycom Community gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and solutions topics.

![Polycom logo]

![Polycom Support logo]

Visit the Polycom Support Center for End User License Agreements, software downloads, product documents, product licenses, troubleshooting tips, service requests, and more.